

REMARKS

Claims 1-10 are pending in this application, of which claim 1 has been amended. No new claims have been added.

The Examiner has maintained all of the prior art rejections based on **Schmidt et al.** and **Hastings et al.** from the previous Office Action of July 16, 2003.

Applicants respectfully traverse these rejections.

The Examiner has urged that thermal sensor TS₁ shown in Figs. 5, 7 and 8 constitutes the “thermoelectric element” recited in claim 1 of the instant application.

Applicants respectfully disagree. Column 5, lines 35-36 disclose that “thermal sense circuit TS₁ ... monitors the temperature of the die.” Figs. 5, 7 and 8 show that thermal sense circuit TS₁ is connected to either element T₁ or element T₂ by a line which carries a control signal 4. This is in contrast to the present invention, in which the thermoelectric element (diode D) is actually “incorporated” into the power MOSFET, as shown in Fig. 1A, for example, and as recited in claim 1 of the instant application.

As shown in Fig. 3 and as disclosed from page 10, line 13 to page 11, line 8 of the specification of the instant application, the power MOSFET is configured as a vertical D (double diffused) MOS structure consisting of an FET and a diode which are formed monolithically, which is not disclosed in any of the cited references.

Claim 1 has been amended to recite this distinction.

Thus, all the prior art rejections should be withdrawn.

U.S. Patent Application Serial No. 10/083,608
Response to Office Action dated October 28, 2003


In view of the aforementioned amendments and accompanying remarks, claims 1-10, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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